## **Gonorrhea**

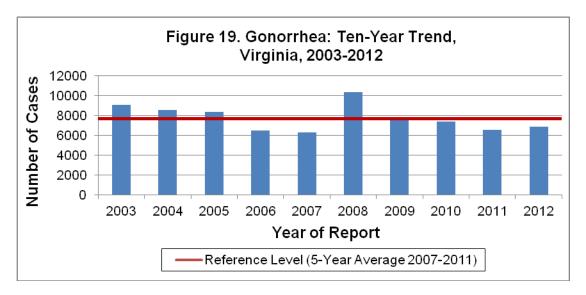
Agent: Neisseria gonorrhoeae (bacteria)

Mode of Transmission: Sexually transmitted through direct contact with infected areas.

<u>Signs/Symptoms</u>: Infected men can have a burning sensation while urinating and a discharge from the urethra. Infected women are usually asymptomatic, although vaginal discharge or bleeding after intercourse may occur. Untreated gonorrhea among women can lead to pelvic inflammatory disorder and infertility.

<u>Prevention</u>: Preventive measures include safe sexual practices and ensuring that infected sexual contacts are treated.

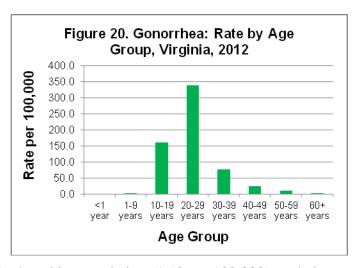
Other Important Information: The progressive development of antibiotic resistance continues to plague gonorrhea prevention efforts. Antibiotic resistance undermines treatment success, heightens the risk of complications, and facilitates transmission of infection. Since April 2007, the CDC has advised against the use of fluoroquinolones for the treatment of gonorrhea, based on data indicating widespread drug resistance in the United States. Furthermore, as of August 2012, the CDC no longer recommends cefixime (an oral cephalosporin) at any dose as a first-line regimen for treatment of gonococcal infections. The CDC now recommends combination therapy for gonorrhea with ceftriaxone administered intramuscularly and either azithromycin or doxycycline given orally for 7 days.



According to the CDC, gonorrhea is substantially under-diagnosed and underreported, and approximately twice as many new infections are estimated to occur as are reported each year. While approximately 337,000 cases were reported nationally in 2008, the CDC estimates that there were actually 820,000 new infections. In Virginia, the 6,894 cases of gonorrhea reported in 2012 represent a slight (6%) increase from the 6,521 cases reported in 2011, but a 10% decrease from the 5-year average of 7,663.2 cases per year (Figure 19). The annual number of reported cases of gonorrhea in Virginia has varied over the last 10 years. The notably low case counts observed in 2006 and 2007, followed by an elevated number of cases in 2008, were at least partly attributed to changes in data handling and data entry protocols. Because of the substantial under-diagnosis of this

condition, it is not clear whether the general declines observed since 2008 indicate decreases in actual disease incidence or instead are a reflection of reduced diagnosis and screening.

A comparison of age groups indicates that the incidence of gonorrhea is highest in the 20-29 year age group (338.2 per 100,000 population), followed by the 10-19 year age group (161.2 per 100,000 population) (Figure 20). These two age groups have consistently experienced the highest gonorrhea incidence since 1989. Gonorrhea remains the sexually transmitted disease with the most significant racial disparity in Virginia. The rate in the black population (278.7)



per 100,000) was 18 times the rate in the white population (15.2 per 100,000), and almost 9 times the rate in the "other" race population (32.6 per 100,000). Gonorrhea incidence rates were higher among females than males (90.8 and 79.1 per 100,000, respectively).

Since 2008, the eastern region has experienced the highest proportion of reported cases, as well as the highest incidence of gonorrhea. In 2012, 2,795 cases were reported from the eastern region (41% of the total statewide), resulting in an incidence rate of 153.8 per 100,000. The central region had the second highest number of reported cases (1,933 or 28%) and incidence rate (140.4 per 100,000). Among the other regions in the state, incidence rates ranged from 29.5 to 72.7 per 100,000.